

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Implementation of Section 309(j))
of the Communications Act)
Competitive Bidding)

PP Docket No. 93-253

TO: The Commission

REPLY OF PAGING NETWORK, INC.

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November 30, 1993

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SUMMARY

The record in this proceeding demonstrates the following points unambiguously:

- Open ascending bidding is the best means of achieving Congress' and the Commission's auction goals, especially with regard to licensing narrowband PCS spectrum. No other auction format even approaches open ascending bidding in terms of promoting certainty, minimizing costs, facilitating aggregation, and maximizing the goals of fairness and rapid implementation.
- Combinatorial bidding on narrowband PCS licenses should not be permitted because it is a decidedly inferior auction format that will inject uncertainty, delay, complexity, cost and unfairness into the auction process.
- Rules requiring substantial up-front payments and full payment of winning bids on auction day are needed to discourage speculators and unqualified parties from participating in the auction process.
- "Earned exclusivity" applications filed by private carrier paging ("PCP") systems who already meet the Commission's requirements for such status should not be subject to auction. Where PCP systems do not meet those requirements, however, mutually exclusive applications for "earned exclusivity" status must be resolved through auction procedures.
- There is no need or place for pioneer preferences in an auction environment.

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REPLY OF PAGING NETWORK, INC.

I. INTRODUCTION

Paging Network, Inc. ("PageNet"), the largest paging company in the United States, hereby replies to the comments of other interested parties on the Commission's proposal to formulate rules that will enable it to conduct simple, efficient, easily administered spectrum auctions at minimal cost.^{1/} The record demonstrates the following points unambiguously:

- Open ascending bidding is the best means of achieving Congress' and the Commission's auction goals, especially with regard to licensing narrowband PCS spectrum. No other auction format even approaches open ascending bidding in terms of promoting certainty, minimizing costs, facilitating aggregation, and maximizing the goals of fairness and rapid implementation.
- Combinatorial bidding on narrowband PCS licenses should not be permitted because it is a decidedly inferior auction format that will inject uncertainty, delay, complexity, cost and unfairness into the auction process.

^{1/} Implementation of Section 309(j) of the Communications Act Competitive Bidding, PP Docket No. 92-253, FCC 93-455, released October 12, 1993 ("NPRM").

- Rules requiring substantial up-front payments and full payment of winning bids on auction day are needed to discourage speculators and unqualified parties from participating in the auction process.

- "Earned exclusivity" applications filed by private carrier paging ("PCP") systems who already meet the Commission's requirements for such status should not be subject to auction. Where PCP systems do not meet those requirements, however, mutually exclusive applications for "earned exclusivity" status must be resolved through auction procedures.

- There is no need or place for pioneer preferences in an auction environment.

II. DISCUSSION

A. NARROWBAND PCS LICENSES SHOULD BE AUCTIONED BY OPEN ASCENDING BIDDING

The Commission recently allocated spectrum for narrowband PCS, a wide array of mobile, portable wireless communications services that includes advanced paging and messaging.^{2/} The Commission envisions such services as enhancing the productivity of individuals and businesses, expanding opportunities for small business participation in the wireless marketplace, and assisting American industry to maintain its leadership position in the global telecommunications market.^{3/} PageNet shares the Commission's view that licensing the newly allocated spectrum rapidly and efficiently is the key to achieving these goals.

^{2/} See Amendment of the Commission's Rules to Establish New Narrowband Personal Communications Services, GEN Docket 90-314, FCC 93-329, released July 23, 1993 ("Narrowband PCS Order").

^{3/} Id. at ¶ 1.

In this regard, it is telling that commenters who addressed narrowband PCS auctions, or who are expected to enter that market, agree almost unanimously that narrowband PCS spectrum should be licensed by open ascending bidding procedures. The consensus view is that no other auction format even approaches open ascending bidding in terms of promoting certainty, minimizing costs, facilitating aggregation, and maximizing the goals of fairness and rapid implementation. Support for this format is not tied to the size of a commenter's company or the type of narrowband PCS service it may offer. Rather, firms endorsing open ascending auctions span the range of narrowband PSC interests, including paging companies and firms that provide many different wireless mobile services. ^{4/} The fact that Telocator -- the trade association of small, mid-sized and large companies most likely to enter the narrowband PCS market -- strongly favors open ascending bidding demonstrates that companies in all corners of the industry believe this format is most appropriate for narrowband PCS. ^{5/}

^{4/} See, e.g., PageNet Comments at 10; Pactel Paging and MidContinent Media Joint Comments at 13-14; Telephone and Data Systems Comments at 6; Arch Communications Group Comments at 11-12; AT&T Comments at 11-12; GTE Comments at 5-6; Southwestern Bell Comments at 18-19.

^{5/} See Telocator Comments at 3.

The lone opponent to this consensus view is PageMart, Inc. ("PageMart"). It argues that open ascending bidding procedures favor "deep pocket" companies, and that sealed "Vickrey" auctions are needed to enable mid-sized firms to enter the narrowband PSC marketplace. ^{6/}

These unsupported claims do not withstand analysis. Many of the smallest parties to this proceeding, including preference entities, unequivocally support open ascending bidding as the best method of enabling small, technologically innovative firms to participate successfully in the auction process. ^{7/} These parties' testimony is a powerful rebuttal to PageMart's claim that open ascending bidding will harm small or, by extension, mid-sized companies.

PageMart's attraction to Vickrey procedures is similarly groundless. As the Commission recognized in the NPRM, these procedures are relatively untested and, where they have been employed, the results were viewed as unfair. ^{8/} The academic literature confirms that whatever theoretical attraction such procedures may hold, in practice they are extremely complex to administer and are subject to gamesmanship and manipulation. ^{9/}

^{6/} See PageMart Comments at 3-8, 11-13, 17-19.

^{7/} See e.g., Council of 100 Comments at 2; Geoteck Industries Comments at 10; National Association of Black Owned Broadcasters Comments at 6-7.

^{8/} See NPRM at ¶ 45 & n.33.

^{9/} See, e.g., M Rothkopf et al, "Why Are Vickrey Auctions Rare," Journal of Political Economy, Vol. 98 (1990) at 94-109.

Given the risks and disadvantages inherent in Vickrey procedures, requests to use them for narrowband PCS auctions should be rejected out of hand.

Instead, the Commission should use open ascending bidding procedures. The Commission endorsed this format in the NPRM. The record shows that this format enjoys the support of nearly the entire narrowband PCS industry. This consensus presents an opportunity to proceed with narrowband PCS licensing immediately, and thereby accelerate the development and deployment of new services to the public. The Commission should seize this opportunity.

Telocator has proposed a simple, easily understandable open ascending bidding format that will ensure a fair auction process and minimize administrative burdens on the Commission and auction participants. As PageNet understands that format, it calls for: (1) oral bidding; (2) on groups of similar narrowband PSC licenses (e.g., all nationwide licenses of the same bandwidth); (3) in which the high bid on each license is posted; and (4) bidding on all licenses remains open until no higher bid is received on any license for some set period of time, such as 30 minutes.^{10/} In addition to being simple and administratively convenient, the Telocator format enables parties to obtain information about multiple licenses at the same time. Armed with such information, parties seeking more than one license will be able to formulate bids that accurately reflect the interdependent values of the

^{10/} See Telocator Comments at 20.

licenses they desire. The format also ensures that winning bids on licenses for substitutable or equivalent frequencies will be approximately the same, eliminating the "winner's curse" associated with sealed bids and the anomalies that might flow from differences in supply and demand perceptions during oral, sequential auctions of homogeneous spectrum. As a result, Telocator's proposed format enhances the likelihood that auctions will achieve two important goals: certainty that the party with the highest valuation will obtain a license at a market-rational price, and ease of license aggregation. In view of all these benefits, PageNet supports the Telocator format, as described herein.

PageNet also recognizes that open ascending bidding can be conducted in other formats. For example, NTIA recommends electronic bidding, using a network of computer terminals. ^{11/} Pacific and Nevada Bell suggest auctioning multiple homogeneous items simultaneously, but urge that bidding be conducted over the course of many days or weeks through the submission of multiple sealed bids. ^{12/}

PageNet is not opposed in principle to variations on open ascending bidding that require the use of computers or multiple sealed bids. So long as the crucial substantive characteristic of open ascending bidding is retained -- i.e., making information

^{11/} See NTIA Comments at 14-16 and Exhibit 1.

^{12/} See Pacific and Nevada Bell Comments at 11-14. PageNet sees no reason to adopt this approach as it will make the licensing process unduly long and cumbersome, further complicating a potential licensee's strategy.

about competing bids available to all auction participants before the auction closes ^{13/} -- the bid submission mechanism (i.e., oral, multiple-sealed, electronic) should not, in theory, effect the auction's outcome.

There is a large gap between theory and practice, however, so the Commission should be extremely cautious about these alternative bidding mechanisms. As NTIA concedes, electronic bidding is a relatively untested mechanism, and one or more trial runs would be required so parties could familiarize themselves with its attributes. ^{14/} The Pacific/Nevada Bell sealed-bidding proposal will necessarily lengthen the auction process, and while the amount of time added to any single auction may not be large, substantial cumulative delay seems unavoidable if many auctions are conducted this way. Given the ambitious statutory auction deadlines the Commission must meet, it should not adopt bidding mechanisms that risk adding complexity or delay to the auction process. Keeping things simple will help ensure that the Commission and auction participants "get it right the first time."

^{13/} This enables each bidder to process the information and act accordingly: staying in the bidding if the pending offer is lower than his own valuation, and dropping out if it is higher. See PageNet Comments at 9-12.

^{14/} See NTIA Comments at 17-19.

**B. NARROWBAND PCS LICENSES SHOULD NOT BE
SUBJECT TO COMBINATORIAL BIDDING**

PageNet strongly concurs with the broadly based coalition of commenters who urge the Commission not to permit combinatorial bidding on narrowband PCS licenses.^{15/} These commenters share PageNet's view that combinatorial bidding is a decidedly inferior auction format that will inject uncertainty, delay, complexity, cost and unfairness into the auction process.

The sole departure from this consensus is, again, PageMart, which asks that combinatorial bidding be allowed on unspecified "groups" of narrowband licenses.^{16/} PageMart also claims that combinatorial bidding is needed to increase the possibility that a firm with few resources will be able to obtain multiple licenses.^{17/} These positions have no foundation.

Allowing combinatorial bidding for narrowband PCS spectrum is entirely unnecessary because the object of such bidding -- to obtain the equivalent of a nationwide license -- is already provided for under the Commission's rules. Those rules establish eleven nationwide narrowband PCS licenses,^{18/} all of which will be subject to auction.^{19/} The availability of so many nationwide

^{15/} See, e.g., Dial Page Comments at 2-4; Arch Communications Group Comments at 13; AT&T Comments at 4-8; PacTel Paging and MidContinent Media Joint Comments at 16-17; Telocator Comments at 5-7.

^{16/} See PageMart Comments at 19-20.

^{17/} Id. at 19.

^{18/} See Narrowband PCS Order, FCC 93-329 at ¶ 26; 47 C.F.R. § 99.405.

^{19/} See NPRM at ¶¶ 115-130.

licenses is one reason why the Commission has tentatively concluded that combinatorial bidding should not be permitted on narrowband licenses. ^{20/} PageMart has provided no persuasive reason to rethink this tentative conclusion.

To the extent PageMart is asking for combinatorial bidding on groups of BTA or MTA licenses, that request should be rejected outright. Even ardent supporters of combinatorial bidding recognize that it must be restricted to nationwide licenses. For example, Bell Atlantic succinctly addressed one of the principal disadvantages of permitting combinatorial bidding at the MTA level:

To an economic theorist, [an MTA level] auction design is not a difficult concept. However, experience has shown that even economics Ph.D. students have trouble understanding [it]. . . .The problem is that if people do not understand the payment rules of the auction then we do not have any confidence that the end result will be efficient. ^{21/}

Other commenters provide persuasive showings that combinatorial bidding at the MTA level, far from being merely a difficult concept, is in fact unworkable. ^{22/} There is no identifiable method of rationally evaluating combination bids that overlap on some but not all MTAs. Disputes about such evaluations cannot be avoided or resolved, and surely will generate a daisy chain effect

^{20/} See id. at ¶ 119.

^{21/} Bell Atlantic Personal Communications Comments, Attachment at 29 (B.J. Nalebuff & J.I. Bulow, "Designing the PCS Auction").

^{22/} See, e.g., Dial Page Comments at 2-3; Comcast Corporation Comments at 5; Cox Enterprises Comments at 6.

that ensnares all the affected MTA licenses in prolonged litigation, thereby delaying service to the public. The bottom line here is unmistakable: combinatorial bidding at the MTA level will inject complexity, uncertainty and unfairness into the auction process. The Commission should deny PageMart's request to add these factors into the auction equation.

PageMart's unexplained assertion that combinatorial bidding is needed to allow firms with few resources to obtain multiple licenses is decidedly curious. To PageNet's knowledge, all supporters and opponents of that bidding format (except PageMart) recognize that it necessarily limits participation to firms with access to substantial amounts of capital. PageMart's claim to the contrary is unfathomable.

Against this background, PageNet strongly urges the Commission to affirm its tentative conclusion not to permit combinatorial bidding on narrowband PCS licenses. The purpose of combinatorial bidding is already satisfied by the Commission's nationwide license allocations. All parties commenting on this issue reject the idea, except PageMart, and it offers no sensible basis for a different result. Under these circumstances, combinatorial bidding on narrowband PCS licenses simply is unwarranted. Providing for it will facilitate no result other than undermining the auction process.

**C. SUBSTANTIAL UP FRONT PAYMENTS AND DEPOSITS
ARE CRITICAL TO THE INTEGRITY OF AUCTIONS**

Substantial up-front payments and deposit requirements are needed to dissuade insincere and financially unqualified parties from participating in the auction process. In particular, winning bidders should be required to pay the full amount of their bids on auction day. Requiring immediate payment eliminates the possibility that a default will disrupt the licensing process, since other bidders will be available for an immediate re-auction if a winning bidder is unable to pay. An immediate payment requirement also enhances the certainty that licenses will be awarded to parties with sufficient resources to construct and operate systems in a reasonable time frame. Those costs are expected to dwarf spectrum costs, particularly for narrowband PCS systems, and if winners cannot pay for the spectrum, they most certainly will be unable to construct a system and begin providing service to the public. Thus, the requirement will not burden legitimate bidders. It will exclude only speculators and financially unqualified parties.

Absent substantial up-front payment and deposit requirements, parties will have nothing at risk and there will be an enormous incentive to bid irrationally and then attempt to secure financing post-auction. As discussed in PageNet's comments, this is a prescription for a series of defaults and re-auctions that will complicate the auction process and substantially delay service to

the public. ^{23/} A wide range of narrowband PCS commenters urge the Commission to avoid this result by adopting adequate up-front payment and deposit requirements. ^{24/}

Indeed, the record demonstrates that the Commission should stiffen its proposed up-front payment requirement of \$0.02 per-POP per-MHz, at least for narrowband PCS. ^{25/} The payment required under that formula for the vast majority of narrowband PCS licenses at the BTA and MTA level is simply inconsequential. Even for a mid-sized BTA the payment would be only slightly higher than \$2,000, while for a large MTA it would barely exceed \$22,500. ^{26/} These amounts are not large enough to accomplish the Commission's goal that up-front payments "ensure that only serious, qualified bidders participate" in auctions. ^{27/} Therefore, PageNet

^{23/} See PageNet Comments, PP Docket 93-256, filed November 10, 1993, at 35-37, 40-42.

^{24/} See Arch Communications Group Comments at 14, PacTel Paging and MidContinent Media Joint Comments at 22-23; Palmer Communications Comments at 8-9; Telephone and Data Systems Comments at 15-16, 20-22; Telocator Comments at 20-21.

^{25/} Many parties offered other suggestions for ensuring that only qualified firms participate in the auction process. See, e.g., Telocator Comments at 20-21 (The Commission should establish minimum up-front payment of \$25,000); see also PacTel Paging and MidContinent Media Joint Comments at 23-24 (up-front payments should be tendered prior to auction).

^{26/} These examples state the up-front payments required to bid on 50 kHz licenses in the Ft. Myers, Florida, BTA (511,400 POPs), and the Tampa-St.Petersburg-Orlando MTA (5,665,000 POPs), respectively, under the Commission's proposed up-front payment formula.

^{27/} NPRM at ¶ 103.

recommends that up-front payments for narrowband PCS licenses be set at a minimum of \$25,000 or (on a per-POP per MHz basis) \$0.04 for MTAs and \$0.08 for BTAs, whichever is higher.

PageNet is aware that the record contains general requests, perhaps intended to pertain only to broadband PCS auctions, to lower or eliminate up-front payment and deposit requirements, ^{28/} even for non-preference entities. ^{29/} No matter how principled these requests may be, the history of Commission licensing proceedings where such requests were granted is stark and straightforward. The licensing process turned into a speculator's bazaar, with all the attendant public interest damage that such a term implies. Commenters making similar requests in the instant proceeding offer no formula for avoiding such damage in the auction context. This alone is reason enough to deny those requests.

^{28/} See, e.g., Alliance for Fairness and Viable Opportunity Comments at 13; American Wireless Communications Corp. Comments at 31-32; Association of Independent Designated Entities Comments at 6-7; Minnesota Equal Access Network Services, Inc. Comments at 2.

^{29/} See, e.g., Sprint Corp. Comments at 18 (Downpayment of 20% of winning bid proposed by Commission should be reduced to 10%, with remainder to be paid in installments over the term of the license.).

D. THE COMMISSION SHOULD CLARIFY THE "AUCTIONABILITY OF PRIVATE PAGING "EARNED EXCLUSIVITY" APPLICATIONS

PageNet requests clarification of the auction status of private carrier paging ("PCP") "earned exclusivity" applications and licenses. 30/

Recent rule amendments concerning the licensing of PCP frequencies in the 929-930 MHz band allow licensees on these frequencies to obtain interference protection rights akin to exclusivity by meeting certain construction requirements. 31/ PageNet strongly supports the new rules, which will provide incentives for full, technologically advanced development of the 900 MHz band without the congestion that is occurring on lower bands.

Under the new rules, PCP licensees who currently meet "earned exclusivity" requirements will be permitted to apply for that status immediately. Those applications will not be subject to auction because they are not mutually exclusive. It is conceivable, however, that two or more PCP systems may apply in the future for permission to build out to earned exclusivity levels on the same frequencies. In such circumstances, the Commission may consider such applications mutually exclusive and subject to auction.

30/ See NABER Comments at 10-11.

31/ See Amendment of the Commission's Rules Governing 929-930 MHz Private Carrier Paging, Report and Order, PR Docket No. 93-35, FCC 93-479, released November 17, 1993.

The Commission should clarify how the auction rules may apply in such instances. Doing so is consistent with the Commission's tentative decision to determine "auctionability" at the earliest opportunity, ^{32/} and will strengthen the ability of all PCP spectrum users to engage in long-range operational planning.

**E. THERE IS NO NEED OR ROOM FOR
PIONEER PREFERENCE RULES IN
A COMPETITIVE BIDDING SYSTEM**

PageNet strongly opposes requests by various commenters that the Commission award preferences in the auction process to bidders that demonstrate "innovative" approaches to spectrum utilization. ^{33/} Such awards are functionally equivalent to pioneer preference rules. The Commission recently proposed to abandon those rules because competitive bidding procedures make them entirely unnecessary. ^{34/} Attempts to force "pioneer" or "innovator" preferences into the auction process will disable it, thwart free market forces, and put an entire competitive industry at disadvantage.

The Commission initially adopted pioneer preference rules because it perceived that its then-existing licensing mechanisms (i.e., lotteries and comparative hearings) stood between

^{32/} NPRM at ¶ 21.

^{33/} See, e.g., Advanced Mobilecomm Technologies Comments at 4; Alliance Telecom Comments at 6-7.

^{34/} See Review of the Pioneer's Preference Rules, ET Docket No. 93-266, FCC 93-477, released October 21, 1993 (Notice of Proposed Rulemaking). PageNet recently filed comments strongly supporting the Commission's tentative decision to rescind its pioneer preference rules. See Comments of Paging Network, Inc., ET Docket No. 93-266, filed November 15, 1993.

innovators and the marketplace. ^{35/} New competitive bidding procedures sweep those barriers away and, concomitantly, eliminate any need or rationale for such preferences.

In any event, pioneer preference rules should not be foisted on the auction process because experience has shown them to be flawed and unworkable. It is far more difficult than the Commission first imagined to determine which parties should, and should not, receive preferences. The Commission has found itself conducting complex comparative hearings to resolve competing and conflicting preference requests. It is simpler and far more effective for the Commission to rely upon the marketplace to make the necessary comparative evaluations through competitive bidding.

Moreover, although pioneer preferences are intended to provide incentives for innovation, they actually generate strong countervailing disincentives. In particular, a party that applies for a preferences based on a particular "innovation" is locked into it. Even if subsequent research and field tests indicate that the innovation is flawed, the preference party's strongest incentive is to proceed with the original idea rather than abandon its preference request. In this regard, the rules actually created disincentives to innovate. In contrast, the strongest incentive in a competitive bidding environment is to use the ideas and technologies most suited to providing the best service to the public.

^{35/} See Establishment of Procedures to Provide a Preference, 6 FCC Rcd 3488 (1991); recon., 7 FCC Rcd 1808 (1992); further recon., 8 FCC Rcd 1659 (1993).

Pioneer preference rules are inherently self-defeating because they require a complex and detailed regulatory regime for awarding preferences. In effect, the Commission replaces one daunting regulatory process with another. Consequently, it is dubious whether the pioneer preference rules create any innovation incentives. By contrast, competitive bidding assures parties that their innovations will receive an objective evaluation by the marketplace.

Pioneer preferences deprive taxpayers any monetary return for use of publicly owned electromagnetic spectrum, and they create the possibility that preference recipients will receive a windfall at the public's expense. Such rules serve no purpose now that far more efficient auction procedures are available to license spectrum.

The Commission should rescind pending preference awards. The advent of auction authority substantially changes the grounds on which those awards were granted, and thereby eliminates any legal compulsion to "grandfather" such awards.^{36/} Since no entity has actually been issued a license under the pioneer preference rules, withdrawing the awards will not affect any service to the public.

Failure to withdraw the awards will harm the public. Common sense suggests that giving a license to one competitor for free, while requiring other competitors to pay millions of dollars for their licenses, will skew the auction process unfairly and

^{36/} See United States v. Storer Broadcasting Co., 351 U.S. 192 (1956).

undermine competitive market dynamics. ^{37/} Neither result will serve the public interest. It is time to close the books on pioneer preferences.

III. CONCLUSION

PageNet respectfully urges the Commission to modify its proposed auction implementation rules and procedures in accordance with the foregoing discussion.

Respectfully submitted,

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^{37/} At a minimum, the Commission must limit the scope of the harm that will result if existing preferences are "grandfathered." One option might be to limit preference holders to a single license in a single BTA or MTA. Even then, the preference holder will have an enormous advantage over competing licensees to the detriment of a fully competitive marketplace.

CERTIFICATE OF SERVICE

I, Terri C. Valeda, hereby certify that on this 30th day of November, 1993, a true copy of the foregoing "Reply of Paging Network, Inc." was delivered by first class U.S. mail, postage prepaid, to the persons on the attached list.



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